

Hugh M. Melton

THE
SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

EDITED BY C. T. BOTT & L. M. BURFOOT.



TERMS.

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March

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.
Xenophon.

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III.

RICHMOND, MARCH, 1843.

No. 3.

TOBACCO.

(Continued from page 26.)

Of Stripping and Prizing.

Stripping is begun as soon after the plants are thoroughly cured and seasoned, as the convenience of the planter will permit. It is taken off the sticks in proper season or order, and packed in a large bulk for this purpose, and generally in higher order than is proper for prizing, which enables the strippers to handle it with less waste, and to tie it more neatly. There are two facts generally believed to exist, in relation to the order of tobacco, which are unaccountable. One is, that tobacco *in order*, or in a moist state, is no heavier than when dry. The other, that if it is taken down and bulked, as it is going out of season, that is, as it is passing from a moist to a dryer state, it will return in the bulk to the highest state of order it had previously acquired. These opinions, however, seem to have been established more by prescription than recent experiment, for I can find no person that will absolutely assert the facts upon his own experience. But be it as it may, the latter fact is so generally believed as to be attended to in bulking tobacco.

In stripping, the best planters make two qualities besides stemmed. For this purpose, every plant passes through the hands of the sorters, (the most experienced and judicious of the laborers,) who pull off the two first, or ground leaves, without looking. Upon examination, the remainder of the plant may be found fit for the first class—perhaps two more leaves are to be taken off, or perhaps the whole is only fit for the second class. In this way, the first class is obtained, the leaves previously pulled off are again sorted for the second class, and what is unfit for this is stemmed.

No definite idea of the quality of the different classes can be well conveyed by description. It can only, and soon will be acquired by observation and experience. The bundles of each consist of four or five leaves neatly wrapped around the head with another leaf. The stemmed tobacco (about two-thirds of the stem only being taken out) is tied in large bundles, and when packed in the hogshead for pressing is untied and laid loosely, but in strait and uniform layers.

After stripping, some planters hang up their

tobacco again upon sticks drawn smooth and somewhat to a feather-edge, and as it comes in proper order for prizing, it is taken down and bulked, and closely and effectually covered till the time of prizing arrives—the months of April and May are thought the best time for this.—Others pack their tobacco in double winrows, that is, lightly lap the tails of the bundles, placing the heads on the outside, and thus raise a bulk of three or four feet in height. It remains in this situation well weighted, but oftentimes without cover all the winter, and perhaps gets completely dry; but returns in proper order for prizing in the warm weather of April and May. It is a matter of much doubt and dispute, which of these two modes is the best. Perhaps the latter is to be preferred, because it is the least trouble, provided the planter has plenty of house room, and can so order it as to leave the winrows entirely free from interruption. Other planters more careless, carry on the operation of stripping and prizing together, without due regard to the order of the tobacco, which may account for the excess of inferior qualities, and diversity of prices exhibited in our markets.

Prizing is the last operation, but not the least important in the care and attention it requires. The size of our hogsheads are prescribed by law. They must not exceed four and a half feet in height, nor thirty-six inches in the diameter of the heads. In these we generally attempt to press 1,500 lbs. but we oftener fall below than go over it. The average is perhaps not more than 1,350 lbs. Our prizes are of the cheapest and simplest construction, generally fixed by the laborers who use them, and not exceeding two or three dollars in entire cost. The stump of a tree is generally used, instead of a post in the ground, until it rots, and the hogshead is protected by a temporary shed, or a light portable roof straddled across the beam. I subjoin a sketch of the one most commonly used. This you will observe operates by an unceasing suspended weight, capable of being increased by the addition of stones to any required extent, and which is suffered to settle gradually to the desired point, by which all danger of bruising from sudden and violent pressure is avoided.—The important points in prizing, are to pack the tobacco neatly, in straight and regular layers. This is best done by putting in only one bundle at a time, pressing and squeezing it closely

through the hands as it is done, to make it occupy less space, by which it will exhibit a better appearance when it is opened for inspection. To make it descend always on a level in the hoghead, by never suffering the beam to be depressed below a horizontal position, and to cause the tobacco in prizing, not to leave the inside of the hoghead, which can only be effected by having different sets of press boards, corresponding to the different dimensions of the hoghead between the bulge and the head.

Your friend,

P. MINOR.

CORN-STALK SUGAR, POUDRETTE AND CINDERS.

To the Editors of the Southern Planter:

Gentlemen,—While looking carelessly over a political paper some time since, I accidentally came across an extract from some southern agricultural journal, relative to the subject of making sugar and molasses from the sap of *green corn-stalks*. Since reflecting upon it, I have a desire to try the experiment, merely for the sake of gratifying my curiosity. This little extract stated that the stalks were ground, but I should think "*beating*" them, in the manner of beating cider, would be a good substitute in a small way. If you have any knowledge on the subject please give us a piece in your next number of the Planter, showing the whole process.

The "*Poudrette*" has been discussed with considerable animation, in our county and I am glad to see you design affording us an opportunity of testing its value.

I tried an experiment last spring with the cinders from the charcoal of a blacksmith's shop, and was greatly surprised at its effects. I placed them upon a small *red* lot, which was put in tobacco, and could see the difference, to a row, between that and the stable manure. The tobacco was larger and heavier where the cinder was placed, than the other portion of the lot. I cannot attribute it to any strengthening quality in the cinder, but it must have changed the nature of the land, so as to adapt to the wet season we had during the whole summer. Do you think there could be any intrinsic worth in the cinder?

This is not written for publication, but merely to satisfy my own curiosity on the subjects alluded to. I hope the interest I take in farming will be a sufficient apology for troubling you. There is no subject which the people of Virginia should be more anxious to investigate than the *SCIENCE* of farming and planting, and no subject on which the laws of natural philosophy would act with a happier and more interesting effect.

Wishing your useful periodical an extensive circulation for the good it may do, and as a

meed for the interest you take in the farmer's welfare,

I am your subscriber

And obedient servant,

C. BASKERVILLE.

Mecklenburg, Jan. 16, 1843.

We have taken the liberty of publishing what was "not meant for publication," and will, in the first place, assure our correspondent, that no apology is needed for "troubling" us upon any subject connected with agriculture.—It will always afford us pleasure to respond, to the best of our ability, to his inquiries, either publicly or privately.

We sincerely hope that the *POUDRETTE* will receive a fair trial in Virginia this year, not that it is, as some have ridiculously imagined, to take the place of farm yard manure, but after all has been raked and scraped from every hole and corner, then we believe it may be well eked out with *Poudrette*. In other words, we believe the farmer can make two or three hundred per cent. by manuring with *Poudrette* that portion of his land, that would, otherwise, go unmanured. Its effect upon garden vegetables is undoubted and most extraordinary.

The cinders from the blacksmith's shop, we have no doubt, were highly advantageous during the wet summer of the last year, in their action as mechanical receivers and dischargers of the gases obtained from the atmosphere, over and above the carbonic acid gas they may have assisted in forming.

With respect to the corn-stalk sugar, we have seen specimens of it equal to any we have ever beheld. Whether it can successfully compete in the market with that from the sugar cane, has yet to be settled, and is certainly worthy of trial. The following directions for its manufacture, furnished by Dr. NAUDAIN, of Delaware, are the most clear and precise that we have seen:

"The fact that sugar can be made from the stalk of corn is one of recent discovery. It has already excited a deep interest in the public mind, and every thing relating to it is looked for with much interest.

"The writer has become possessed of some facts which may materially aid others in the present experimental state of the business. For as yet it is experiment, although enough is known to convince the most sceptical that the probability is that sugar from Indian corn will be, at a future and not very distant day, one of the great staples of the country.

"Without further remark, then, it should be remembered that as much corn-stalk as possible should be grown. To do this, the corn should be planted as broom-corn is commonly planted—very close in the row, probably a stalk every three or four inches. The tillage will be the same as for broom-corn. When the young ears begin to appear it is necessary to pluck them off carefully, and to repeat the gathering as often as is necessary so as to *prevent the formation of any grain*. Because if grain be allowed to form, it takes all the sugar from the stalk.—About the time that corn begins to harden, the making of sugar should be begun. It is not necessary to say any thing about a proper mill to crush the stalk and separate the juice, because mills of the cheapest kinds only should be employed now, until the business would fully warrant an expensive outlay. It would probably be found that the common cider mill, with plain cylindrical nuts, would be quite sufficient for a farmer who would raise a fourth or half an acre of corn for sugar for his family, and this quantity would be quite sufficient for satisfactory experiment.

"When the juice is separated from the stalk, about a table spoonful of white wash made of the *best quick lime* and about the consistence of thick cream, should be added to each gallon of the juice, and then the boiling should commence. The scum that rises should be carefully removed; and the juice, if this process has been properly and carefully conducted, will be quite clear and nearly colorless. Then commences the process of evaporation; and when the juice has boiled down in about the proportion of eight gallons to one, the boiling will be completed, and it may be poured out into a shallow tight wooden box to grain.

"It has been ascertained, although as yet the reason is unknown, that if the juice be boiled in a deep vessel, like the common cooking vessels, sugar will seldom be obtained; while if it be done in a shallow vessel, so that the juice at the commencement of the boiling shall not be more than three to five inches deep, sugar would be obtained without difficulty. It has been ascertained also that the sugar from corn will not grain so readily as that from the sugar-cane.—And in some instances it has remained more than a week after the boiling before the sugar was formed, and yet excellent sugar made.

"It should be *particularly remembered* that the juice should be boiled *as soon as separated from the stalk*. It becomes acid very soon, and no sugar can be made if the juice be allowed to stand two or three hours before it is boiled. The juice will even spoil *in the stalk* before it is ground, if the stalk be cut off a few hours before grinding. It is necessary then that every part of the process should be done with the greatest despatch. The stalks should be brought

to the mill as soon as cut, and ground immediately. The vessel for boiling ought to be properly filled in an hour, or at most two hour's grinding. And the process of boiling down should immediately commence and be continued until completed.

"Excellent syrup, superior to the best molasses, will be obtained by observing the above directions, and boiling five gallons of juice to one gallon.

"The juice of the corn-stalk is very rich in sugar when cultivated in the manner suggested. Tested by Beaume's sacrometer, the instrument used to measure the strength of syrups, the juice of the corn-stalk weighs 10 to 10½ degrees, which is about the weight of the juice of the best cane in the West Indies, and is richer than the juice of the cane in Louisiana, which is seldom heavier than 8½ degrees.

"One gallon of juice will produce nearly 1½ pounds of sugar; and an acre of good corn will yield, if carefully expressed, from 700 to 1,000 gallons of juice."

From the Farmers' Cabinet.

HENS' EGGS.

I notice in the Farmers' Cabinet for 4th mo. last, page 275, an inquiry as to the truth of the assertion, that hens' eggs which are *round* produce female chickens, and those which are *long* or pointed, produce males.

When a boy, I was in a situation to be able to indulge my fondness for fowls, and often raised chickens;—without ever having heard of the above facts, I discovered that the eggs which approached the nearest to the roundness always produced females, and those which were pointed at one end always produced males—I acted accordingly, and always succeeded in obtaining females or males according as I wished.

After a lapse of a number of years, being in Philadelphia market, I happened to mention the fact to one who raised chickens for sale, and who preferred the males, because they grew larger—the information was received with some surprise; but I advised the person to try it, and afterwards was informed of the entire success of the experiment, all males being produced by selecting the long or pointed eggs.

I since find the fact was mentioned by a writer over two thousand years ago.

L. H.

GOOCHLAND FAIR.

We alluded in our last to the proceedings of the fall meeting of the Goochland Agricultural Society, a report of which was transmitted to us by the Secretary just after the emission of our December number, with a request that we

would hand it over to the daily papers of the city, that it might be published before the period for our next issue. We accordingly complied with this request, and, much to our regret, the paper was misplaced, and we never regained it until just as our February number was going to press.

Our limits will not admit a circumstantial detail of the proceedings of agricultural meetings, but we are always happy to receive their reports in full, because from them we are frequently able to extract matters of great interest to our readers. This meeting seems to have been one of peculiar interest, and it is not even yet too late to note some of its most prominent proceedings. For instance, we observe that the premium for the best cultivated farm was awarded to Mr. TARTLTON FLEMING.

We have seen Mr. Fleming's farm more than once, and we think all that have had an opportunity of judging, will bear us out in saying, that the committee would probably have made the same award, if the whole Union, instead of the county of Goochland, had entered the lists. At any rate, we have never seen a farmer, at the North or the South, who excelled Mr. Fleming in the cleanness, neatness, and closeness of his cultivation. The second premium was awarded to Mr. JOHN M. VAUGHAN, and the third, to Mr. HENRY SHELBURN, "a poor man, who in early life had the misfortune to lose both his feet, and, with no other aid than a small boy, performed all the labor on his farm, which exhibited remarkable neatness and good management."

To Dr. William L. Wight was awarded the premium "for the best piece of cloth for men's winter wear." With this premium we were particularly pleased, because we go very far for the protection of domestic industry, and we believe the very best mode of encouraging home products, is the substitution of them, by individuals, for articles of foreign growth. We have said we carried the doctrine of "protection" very far; with farmers, especially, we would carry it to their own farms and their own firesides. If there is an exception on earth to the general rule of the value of a division of labor, whereby one man devotes all his labor to one production, it is afforded by the peculiar nature and circumstances of the farmer's occupation. The changes of the seasons, the complicated nature of his pursuit, the isolated character of his situation,

the necessary redundancy of labor, at the South, compel him to combine many divisions of labor, and no matter how tempting the cheapness of "manufactured" products may appear, we believe as a general rule, with very few exceptions, it is true, that he that makes most "within himself" and purchases least, is best off.

We were very happy to see that the ladies came in, not only for a large share of the premiums, but also of the compliments of the Society. To the latter, from what we ourselves once saw at a fair in Goochland, we know they were pre-eminently entitled.

We will now proceed to review

DR. WIGHT'S ADDRESS.

This is a very ingenious, scientific, and well written document. The Doctor after explaining the received theory of the parts performed by the soil, the atmosphere, and solar light, in the production of plants, lays great stress upon the value of the green ray, which is reflected. That plants are generally flourishing, when they look green, is what we all know, but to say that their vigor is owing to the reflection of the green ray, is no more reasonable, it seems to us, than to say that the reflection of the green ray is owing to the healthiness of the plant, which would be nothing more than to say, what has been familiar to every body for ages, that when a plant is healthy, it looks green. Again, why not say, that the vigor of the plant is owing to the absorption of the other six rays, rather than to the reflection of the green ray, which it rejects.

Lime, the Doctor urges, is beneficial to plants by enabling them to reflect the green ray to greater perfection; this he tested by growing plants in cotton, watered with rain water, holding more or less of carbonate of lime in solution. Those plants receiving the dissolved carbonate of lime, gave off, through their leaves, more oxygen, and reflected more strongly the green ray. That carbon is necessary to the growth of plants, analysis has proved long ago, that carbonic acid gas is absorbed by plants under certain circumstances, and that the carbon is appropriated and the oxygen given off, is well known, and that carbonate of lime, which is composed of carbon, oxygen, and lime, increases the vigor of plants, has been satisfactorily ascertained, and that the increased vigor will be attested by increased greenness, is proverbial, and was, we should say, confirmed by

the result of the Doctor's experiments. He also notices the fact, attested by Mr. Ruffin, Mr. Purvis, and Sir John Sinclair, that the atmosphere incumbent upon limed lands is always a healthy one. He calls to mind, also, the well known circumstance, that low, wet lands, where the cultivated plants present a pale, sickly appearance, are also the generators of that class of diseases, known as bilious. From these circumstances, the Doctor infers that the healthiness of the atmosphere is intimately connected, in some way, with the power of plants to reflect the green ray of light. We would again respectfully inquire, if the old idea, that the vigor of the plant, *evidenced by its greenness*, promotes the wholesomeness of the atmosphere by its increased consumption of the deleterious carbonic acid expelled from the lungs of animals, is not as reasonable as the more novel hypothesis of Dr. Wight.

But we have probably already devoted greater space, than will be agreeable to our readers, to this theory of the Doctor's. We will, therefore, conclude by extracting what the Doctor, whom we know to be a practical man, declares to be the practical rules, to which his observations and experience have brought him:

"1st. That as the growth and nourishment of plants appear to be alike dependant on the results of the decay of organic, or animal and vegetable matters, and upon those inorganic substances which increase their action upon the light, we are thus admonished of the necessity, the absolute, indispensable necessity, of periodically restoring to the soil, an amount of both those elements corresponding with that which is taken from it by cropping. If one of those elements only be returned, the productive powers of plants will not be developed to the extent of which they are susceptible. If both be withheld, the soil must, and will deteriorate, because plants are thus deprived of the means by which they live, and grow. Both, then, are essential to the corruption of decayed plants, the leaven of the salts must be added, to give rise to forms of the highest beauty and usefulness. The superiority of animal, or putrescent manures, as they are termed, over those of vegetable origin, is owing solely, it is conceived, to the alkaline salts, which the former contain. But as in these, the ammoniacal, or volatile salts predominate, their effects are necessarily transient, and hence the utility and economy of using those of more fixed character, as lime and ashes. As regards the quantity of alkaline earths, or salts of lime, to be applied to an acre of land, my own experience does not enable me to decide. But is it

not reasonable to suppose, that this question, as far as it relates to the action on the light, should be determined by their solubility? It is well known that plants can take up nothing except in the form of solution, and we have abundant evidence going to show that the effects of fifty or a hundred bushels of lime or ashes, have been distinctly visible for an equal number of years. Hence it would appear that the quantity of rain, which falls upon an acre of land, is not adequate to dissolve more than a bushel of these substances. If it were otherwise, if more were dissolved, plants would certainly take up a larger quantity, and the effects would necessarily be less permanent. If, then, this mode of reasoning be correct, a bushel of either of these salts enumerated, or what would be far preferable, as they all have their peculiarities of action, a bushel of each will be fully sufficient for the attainment of their direct influence. To secure their indirect benefits in loosening the soil, and rendering it more permeable to atmospheric influences, thus alleviating human toil, a much larger quantity will, of course, be required. Is the question here asked, whence is the magical influence of plaster compared with the other salts of lime if they act upon the same general principle?—the answer seems to be that it is referable to its superior power of increasing the action of plants upon the light. Thus the experiments of Sir Isaac Newton have shown that bodies of an unctuous, or sulphureous nature, have a greater relative refractive power, than others, or than their densities indicate. Plaster is a sulphate of lime, consisting of sulphur, oxygen and lime. May we not hence fairly infer that it is the subtle influence of the sulphureous principle, upon that all important agent, light, which enables plaster to produce an effect apparently so vastly disproportioned to the cause.* Consistently with this view the acknowledged pre-eminence of plaster and clover in the rapid improvement of land may be explained by the superior refractive power of the former acting through an appropriate medium in the broad leaf of the latter. Hence it is also that its powers are still more conspicuous in the tobacco plant and the pumpkin vine; its apparent beneficial effect being proportioned to the extent of surface through which its influence is exerted. Indeed, without the aid of those substances, which increase the action of plants upon the light, the broad leaves may be supposed to be less adapted to the purposes of profit and improvement than the narrow leaved, since the operation of nature, a constant and close relation

* Even admitting with Liebig that on the application of plaster a double decomposition ensues, whence results carbonate of lime and sulphate of ammonia, still the singular properties of plaster may be ascribed to the increased action in the light which the sulphureous principle is known to impart.

obtains between the size and structure of the leaf, and the amount of these elements in the soil. Thus when a piece of land has been impoverished by injudicious culture and left to recover by its own natural resources, it invariably clothes itself with a growth remarkable for the narrowness of its leaves. The pine presents us with a familiar illustration of nature's mode of adaptation of plants to soils, and conveys to us at the same time another lesson for imitation in returning good for evil.

"2dly. The essential elements of fertility, organic matters and the salts of lime, having been supplied, the next object will be to counteract the operation of antagonist processes. Of these the chief are the presence of plants other than the proper occupants of the soil and an habitual excess of water. The remedy for the first is through cultivation, and for the second through draining. By thorough draining is meant, the deanston, or furrow system, which has conferred such distinction on the husbandry of Scotland.

"The two preceding rules appear to comprehend the distinguishing of the new or improved system of husbandry. These are, 1st. The alternation of crops, or the introduction of the artificial grasses and of root culture into every system for the purpose of feeding stock or of ploughing into the land—the ultimate object being to replenish the earth in the most economical manner, with the food of plants—with manures. 2dly. Draining and the application of lime, ashes, plaster, marl, &c. Draining and the application of the alkaline earths and salts are classed together, because their action is conceived to be identical—both enabling plants to attract more food from the atmosphere, and at the same time to adapt it more completely to their wants. This twofold purpose they effect through the formation of a substance whose subtle influence upon light gives health, and vigor, and beauty to the vegetable creation.

"Having already, I fear, trespassed too long on your patience, I must beg you to bear with me a few moments longer. We have associated ourselves for the advancement of a cause, not only noble in its object, that of augmenting the means of human subsistence and human enjoyment, but moreover, eminently conducive, if rightly pursued, of that elevation of mind which should be the end of all our studies. The farmer's life is a daily contemplation of a process which ceases to be realised as a miracle, and thus fails of its due impression, because we do not consider that the succession of events of which it is made up is nothing less than a beneficent adaptation to our present state of being—that it is an arrangement in perfect harmony with the dispensation under which we live.—Let us then resolve that henceforth we will rightly pursue it—that with diligence and humility we will study those laws which Infinite

Wisdom has ordained for the government of the visible Universe, and bring them into suberviency to the happiness and virtue of mankind, by obeying, and thus 'honoring these laws when we see them clearly, and adoring their profundity when beyond our reach. If the works of nature be thus contemplated, the world from henceforth becomes a temple, and life itself one continued act of adoration.' "

BLACKSMITHS' WORK.

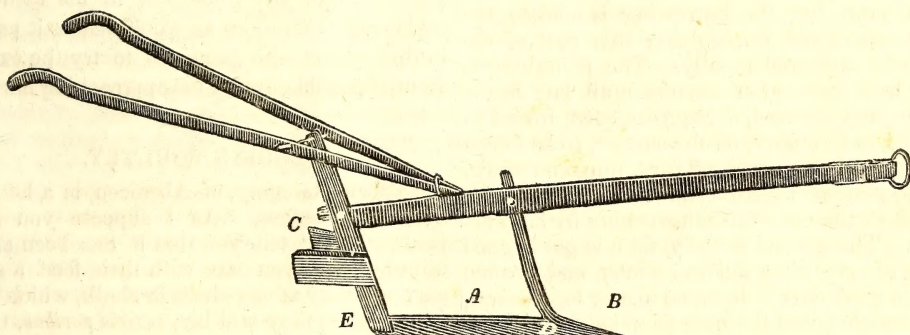
As many of our farmers have blacksmith's shops of their own, the following directions for working steel and making edged tools, plain and simple as they are, may be of great value to them if carefully enjoined upon their smiths, who are frequently great bunglers in this kind of work:

"**WORKING CAST STEEL.**—We have recently obtained information on this subject, from the most skilful and celebrated workman in the United States, Capt. J. Hill, of Billerica, Massachusetts. We were a little surprised to learn the difference in the management of cast steel, from that of the German. There is something yet remaining mysterious with regard to the nature and management of this article, which no cyclopedia or other vehicle of intelligence have as yet developed. The process of manufacturing cast steel, it is not our purpose at present to describe; but it is evidently composed of refined iron and carbon in very nice proportions. In the process of shaping it into cutting blades and other articles, it is heated and hammered in the manner of other steel: when tempered for this purpose, it is first heated to a full cherry red, and plunged into water till cold. It may then be held over a moderate charcoal fire, until the color of any part which has been filed or made bright after hardening, changes to a reddish orange color. This is the temper for cutting tools; but if a spring temper is required, it is heated over the charcoal till the color approaches a blue: or rather, blue inclining to red. In either case when the steel is brought to show these colors, it is to be plunged in oil—common lamp or linseed oil—which will not affect the color. If the steel is to be rendered soft for turning or cutting, it must be heated to a full red, and left to cool in partially ignited charcoal; in this way it may be made so soft as to be cut or turned into shape as easily as copper, or even common pewter. But the most curious and peculiar process is that of welding. In welding iron, a white heat is indispensable, as every body knows: but not so with cast steel. When the steel is to be welded to iron, neither are to be heated above a full cherry red. The two parts are to be previously lashed or *griped* together, and in

that condition heated: they have then only to be immersed in calcined borax; or to have the prepared borax (borate of soda) sprinkled over the joint, and are ready to adhere by being hammered together. The borax for this purpose, is to be prepared by being previously heated to a full red, and kept heated till it becomes a soft powder like flour. What the chemical effect of the calcined borax on the metallic surfaces is, is not perfectly understood, farther than that its affinity for oxygen is such as to deprive the jointed surfaces of any portion of oxygen which might prevent a ready union of the surfaces. When small pieces of steel are to be welded, they are to be heated to the full cherry red, and immersed in the calcined borax, and are then to be hammered together. The most

extraordinary point in the process is the fact, that if the steel is but a little overheated, it will immediately crack into fragments; but by a shifted process, and with the use of borax, the cracks and defects may be healed and rendered sound and solid. We have witnessed the fact, that by a judicious management, a fine tempered cutting edge of cast steel may be bent, warped and hammered, and its shape materially changed, without breaking, or affecting the temper. More may be said on this subject in a future number; but we close for the present with the remark that, even Anderson & Co. the celebrated manufacturers of cast steel, are evidently unacquainted with all the merits of its peculiar properties.—*American Mechanic.*

WINGED COULTER.



The engraving represents an implement very highly recommended by Mr. James M. Garnett, in his report to the Board of Agriculture, for opening corn furrows. We have known it used for several years past greatly to the satisfaction of some of our best farmers. It is in fact nothing but the old-fashioned coulter, made sometimes in one shape, sometimes in another, with the addition of the wings, that may be placed higher or lower, or altogether removed, at pleasure. The coulter is sometimes made with a double point, so that in case of wear or accident to the front, it may be reversed, and the other point brought into play. Mr. Garnett thus describes the one figured in the sketch above:—"The letter *A* represents the bar of the coulter, 1 foot long, and made out of inch square iron. At the end *D*, it has a point which fits into a hole in the heel of the coulter *B*. This is 6 inches long from heel to point, which is sharp,

and about an inch and a half broad. The upright part of the coulter should be about one and a half inches wide, and three-quarters of an inch thick. The letter *C* represents two small mouldboards of wood, about 6 or 7 inches long, and 4 wide. They are fastened on with screws or nails, and are to be used only for opening a furrow to plant corn, or any thing else planted in the same way. The advantage of this fixture is, that the furrow will be opened only to the required depth, whilst the coulter, which works several inches deeper, pulverizes the earth below the seed, and thus forms a soft bed for the reception of their roots. In using the coulter to prepare new grounds for the plough, or for other purposes, the mouldboards should be taken off. The letter *E* represents the screw bolt which fastens the end of the bar to what may be called the helve."

For the Southern Planter.

GRASS, RUTA BAGA AND ROLLERS.

Messrs. Editors,—I observe in the Planter of this month, that Mr. William Carter, on the Chickahominy, (a stream dear to me) had tried the mode called *new*, of renovating grass lands as practised in the East somewhere, and found it to answer to his entire satisfaction; and, that he was convinced of the utter inutility of a cleansing crop where grounds required reseeding in grass.

Now, I saw this done as far back as 1817, at Ricohoc, in the county of King & Queen. The land had been put in herdsgrass by Col. Smith, and the then occupant of the estate broke up that portion of it for the purpose of planting in corn, but before it could be properly prepared, the grass made its appearance between the furrow slices, plainly indicating that the effort to obtain a grain crop would be attended with more labor than could be bestowed on it, and upon being abandoned, a fine growth of grass ensued. On the Bordley meadows in the same county, it has been the uniform practice for several years, but the harrowing is omitted, the rains, snows and frosts doing this part of the business pretty effectually. The ploughing is done from soon after harvest until late in the winter, and the seed, if requisite, sown from December to February, on the surface, to be forced in place by the action of frost, rain and snow.

En passant, I have seen ruta бага made with less work than our anti-silk-stocking friend practises. The ground intended for it is put in good heart the preceding fall and winter, and covered with a good coat of litter, no matter how coarse, and remains until the time for planting arrives; then, season or no season, it is thoroughly broken up, harrowed, and the seed dropped thin from a drill, by stakes, and well and firmly rolled in. A thin sprinkling of lime follows, and the crop rarely, if ever fails. The subsequent working consists in the repeated use of the cultivator, and occasionally the hand-hoe, till the leaves have attained a size which will endanger their breaking. The thinning is done by degrees, as taking away the superabundant plants too fast will cause them that are left to fall, and often perish.

I have no hesitation in saying that this crop is generally sowed too early in our climate, and that the gathering of it at once is wholly useless. Every other row may be used out, and the remainder secured by dipping a plough pretty deep on each side of them.

Speaking of rollers, I have lately seen one that certainly is preferable to all others that have come under my observation. A shaft twelve inches square is pierced by three sets of arms, to which are attached fellos of suitable dimensions; upon these are strongly nailed slats three

inches wide, one and a half thick; inch and quarter winged gudgeons are inserted in the ends of the shaft, and the frame, which is so close behind as to keep the cylinder clean, has hounds and tongue like a wagon. The driver's seat is on the hinder part of the frame—the machine stands four feet six inches, carries a five foot row, and is an easy draught for two good horses; they should, however, be relieved occasionally during the day, in fact, an all-day's work is too much for any team to any ponderous machine through ploughed ground.

OBERLIN.

Query. Will M'Cormick's reaper answer to mow grass? Has any one tried it?

We thank our unknown friend for his communication, *nameless* as it is. We have no doubt his roller is an excellent one.

M'Cormick's reaper, as at present constituted, is not exactly adapted, we should imagine, to mowing grass. We mentioned the subject to the inventor, when he was with us, and he expressed to us his confidence in his ability to make such alterations as would render it perfect in this respect—he promised to try the experiment, if possible, during the approaching harvest.

FEEDING POULTRY.

Professor Gregory, of Aberdeen, in a letter to a friend, observes, "As I suppose you keep poultry I may tell you that it has been ascertained, that if you mix with their food a sufficient quantity of egg-shells or chalk, which they eat greedily, they will lay, *ceteris paribus*, twice or thrice as many eggs as before. A well-fed fowl is disposed to lay a vast number of eggs, but cannot do so without the materials for the shells, however nourishing in other respects her food may be; indeed, a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat on the walls, would lay no eggs at all, with the best will in the world."

INDIAN CORN AND OLD FIELD PINES.

To the Editors of the Southern Planter:

Gentlemen,—I have been a subscriber to your paper ever since it has been published, and I have noticed that nearly all your correspondents upon the subject of Indian corn agree, that the rows should be four and a half or five feet distant. This is no doubt the proper distance for all the corn east of the Blue Ridge, but I once happened to be present, in the south-western part of Virginia, at corn planting time, and was surprised to observe the farmers laying off their rows from three feet, to three and a half, wide.

I told them they would make no corn, and insisted that the rows should be wider. One gentleman told me to lay off a few rows in the old Virginia style, and I, being accustomed to the plough handles, laid hold, and run off a few furrows through the centre of the field, four and a half feet apart. In the succeeding August, I visited the same field, and, to my utter astonishment, the rows I had lain off were destitute of grain, and the fodder burnt entirely up, whilst the narrow rows were excellent and the fodder green to the ground. So, I concluded that the proper width of rows depends upon the nature of the soil. I noticed that the lands in Western Virginia dried much sooner after heavy rains than they did east of the Blue Ridge; this is the case in all limestone countries, where the corn must be planted thicker, for the purpose of shading the ground, and retaining the moisture in summer.

I congratulate neighbor Drummond on his conversion to early planting. I have tried the experiment myself, and find that corn planted early will not grow as tall, but will yield more grain, and that of better quality, for it will weigh more to the bushel than the late planting.

A writer on "Forest Trees," in your August number, 1842, observes that old field pine is "of little value." Now I consider a grove of such pines exceedingly valuable for garden posts, or posts of any kind; if properly prepared, they will last as long as locust or any other timber. My mode of treatment is as follows: I take a drawing knife and draw off the bark as the tree stands, as high up as I want to use it: in this situation the tree, which will not die, remains a twelvemonth, when, in consequence of the sun's having drawn the resin to the surface, it will have become a solid bulk of lightwood and will be ready for use.

Your obedient servant,

J. H. FUQUA.

Amherst, January, 1843.

ECONOMICAL PAINTING.

The following cheap but durable method of painting, has recently appeared in a foreign journal, and as it appears rational in its principles, we have no doubt of its being useful to many in the country, especially in these economizing times:

Take skimmed milk, one quart—fresh slacked lime, six ounces—oil of linseed, four ounces—Spanish white, say whiting, five pounds. Put the lime into a vessel of stone ware, and pour upon it a sufficient quantity of milk to make a smooth mixture; then add the oil by degrees, stirring the mixture with a small wooden spatula; then add the remainder of the milk, and finally the Spanish white. Skimmed milk, in summer is often curdled, but this is of no conse-

quence, as its fluidity is soon restored by its contact with the lime. It is, however, absolutely necessary that it should not be sour, for in that case it would form with the lime a kind of calcareous acetate susceptible of attracting moisture. The lime is slacked by plunging it into water, drawing it out, and suffering it to fall to pieces in the air. For painting with the ochres, the commonest lamp oil may be used. The oil when mixed with the milk and lime, disappears, being entirely dissolved by the lime, and forms, with it, a calcareous soap. The Spanish white must be crumbled, and gently spread on the surface of the liquid, by which it is gradually imbibed, and at last sinks. It must then be stirred with a stick. This paint is colored like distemper, with charcoal; levigated with water, yellow ochre, &c. and applied to the work in the usual method by brushes.—*Mechanic.*

TIMBER.

To the Editors of the Southern Planter:

Gentlemen,—Will you be good enough to ask through your valuable journal, whether timber lasts better, cut in winter than summer? If so, I should like to hear the *rationale*. I know the old theory that the sap is out of the tree in winter and has gone down to the root. Upon this I am very skeptical—seeing that the roots are full of sap in summer, and therefore they cannot well hold during winter their own and that of all the branches likewise. So let us hear what is the most lasting timber for posts? Does chestnut under ground decay sooner than oak?

In haste, yours truly,

WHIT'L P. TUNSTALL.

We believe the most approved doctrine of modern times is, that the sap of trees becomes spissated, or thick, during the winter months, and ceases to flow, the vital energies of the tree being dormant, as it were, until called into action by the genial heat of summer. Under this view, many contend that the timber should be cut in the summer, rather than the winter, because the sap, which is considered so injurious to the lasting properties of the wood, can be more readily expelled in a fluid state. Others contend, that the pores of the wood are more open in summer than in winter, and a great many talk a deal of nonsense upon the subject. We knew a very old experienced timber getter who asserted, that there was but one day in the year upon which timber should be cut, and that was the 28th day of August. To determine the matter by experience, requires a greater degree of exactness and a more extended obser-

vation, than usually falls to the lot of men engaged in the business.

We should be very much obliged for any information that will assist our esteemed correspondent.

From the Farmers' Cabinet.

THE POTATO.

Mr. Editor,—It is, perhaps, not generally known to the subscribers of the Farmers' Cabinet, that in the potato there are two parts, which, if separated and planted at the same time, one will produce tubers fit for the table eight or ten days earlier than the other. This fact has fallen under my own observation, and is the plan I now pursue in order to obtain an early supply for my table, fine and very mealy. The apex or small end of the potato, which is generally full of eyes, is that part that produces the earliest—the middle or body of the potato produces later, and always large ones. The butt or navel end is worthless, except for feeding stock, and, if planted, produces very indifferent small ones, and often none at all, the eyes, if any, being imperfectly formed. The potato being cut two weeks before planted, and spread on a floor, that the wounds may heal, separating the small end from the middle, then cutting off the navel or butt, the body or middle of the potato is then divided into two pieces lengthwise, taking care to have always the largest and finest selected, being convinced that if none but large potatoes are planted, large ones will be again produced—small things produce small things again, and therefore no small potatoes should be planted; this practice is too prevalent, and may account for the many varieties and small potatoes met with in our markets. Who would not prefer a large mealy potato to a small one, that will take hours to boil soft, and then may only be fit to feed the cattle with?

For several years past I have adopted the plan of putting potatoes into the ground late in the fall, covering them with manure, sometimes with tanners' waste bark, and always have succeeded in raising a fine early crop. Last fall I had taken up some as fine and large Mercer potatoes as any one could wish; they were covered with tan six inches thick the preceding fall; many weighed sixteen ounces. No particular care or attention was bestowed upon them through the summer, the tan not permitting any weeds to trouble them, or to draw out the nourishment from the earth, they had therefore all the benefit of the soil, kept moist and clean by the tan, for tan will keep the ground moist and clean, and in an improved state in the driest season. I have found the great advantage of it to my asparagus and strawberry beds, which are annually covered with it.

The potato I consider so valuable and indispensable a vegetable, and having never seen a suggestion in print of separating the potato and planting each by itself, that I have been induced to send you this imperfect and hastily drawn up communication. Perhaps you may think it worthy a place in the Farmers' Cabinet, and if so, should be pleased to hear that some of its patrons will try the experiment of planting separately each part of the tuber, believing that the potato may be much improved by a due regard to the above suggestions.

J. F. H.

Lancaster, February 26, 1842.

NEW HORSE SHOE.

A simple but most ingenious invention has been laid before us in the shape of an improvement in the horse shoe. It is that of making that part of the shoe which is now solid concave; by which the foot is enabled to take a grip, which with the ordinary shoe, is impossible. The principle is, in fact, that of the fluted skate; and whilst the shoe is, of course, lighter than when manufactured on the usual principle, it is equivalent in slippery weather, or on wood pavement, to one that is roughed. The concavity runs entirely round the shoe, having a strong rim in form, equal in thickness to the hoof of the horse's foot, and another at the back, of half that thickness. This mode of formation, whilst it involves the use of a smaller quantity of iron, and consequently less weight, gives a far greater purchase, and is much more in accordance with the nature, form, and texture of the horse's foot. By preventing the necessity of turning up the shoe behind, it places the foot in a more natural position, and thus assists in bringing into operation the frog, instead of placing it out of action, and straining all the other parts of the foot.—*United Service Gazette, England.*

For the Southern Planter.

SOAP-STONE AND COAL-TAR.

Messrs. Editors,—If yourselves or any of your numerous readers can give me any information relative to the application of oil and soap-stone to the roofs of buildings with a view to making them fire-proof, I would be very thankful for it. Having seen in agricultural papers so many puffs of what, afterwards proved to be worse than useless, I repose but little confidence in theories which have not been submitted to the touch-stone of experience.

Will the mixture of oil and soap-stone, therefore, render the roof of a house fire-proof? and will it last long? or will it require frequent renewal?

I would also inquire, gentlemen, whether

either of you, or your readers, has had any experience in the application of coal-tar, and if so, what is the result of that experience?

Very respectfully,

AN INQUIRER.

P. S.—If I mistake not, I think I have seen both of the above applications objected to.

AN INQUIRER.

We should be glad to receive any information upon the subjects alluded to above.

GARDENING.

Gardening time is upon us. And why should not farmers have as good gardens as villagers? We always expect when we see a large enclosure attached to a village residence, that a well cultivated garden will be found within it; and why should we not expect the same on every farm? There is no good reason why. But sadly different, in many instances, is the case! You see often the large farm and the small farm well cultivated, and the garden almost entirely neglected. Is the latter of less importance in its place than the former? By no means. Do the farmer and his family relish the products and fruits of the garden less than others, when they have them? Not at all. Then why this neglect? It proceeds entirely from a mistaken estimate of horticulture. The products of the garden are deemed of little moment, and those of the farm every thing. All hands are hurried and driven day after day on the farm, and the garden, which perhaps has only a wretched little bed or two, is often permitted to go to weeds, unless cultivated by the poor women, who generally find their hands full with their children and domestic labors. Never was there a greater blunder than this in the cultivation of the earth. There is nothing furnishes a richer amount of healthful and delightful sustenance to a family than a good vegetable garden. Indeed, some families with very small garden spots, who carefully cultivate them, receive from them their chief support. Go into their dwellings when their tables are set and you may see a profuse display of vegetables; and perhaps on entering the house of a neighboring farmer about the same time of day, and though there be an abundance of meat and bread, the display of vegetables will be lean and stinted!

A little judicious expenditure of time would entirely correct this incongruity, and furnish to every farmer a rich and delightful table of vegetables through the year. In the first place he must have his little garden spot fenced off with rails, if he is not yet able to do it with pickets. It must be a separate enclosure from the rest of the farm, and kept so faithfully. He must appropriate a day to ploughing and preparing and

sowing his earliest beds—no matter what the hurry of business. After these are done well, as the season advances, and the time arrives for putting in the later vegetables, if he cannot spare time in the morning, let the team stop in the course of the day, and let them be well finished also, and the business is done until weeding time. When this comes, an hour in the morning early for two or three mornings in a week for a very few weeks, will keep the beds perfectly clean, until the vegetables are fit for the table, and then what will be presented?—one of the finest spots on the whole farm—a luxuriant garden, from whence a rich and healthful treat may be gathered—rendering comparatively but little animal food necessary, and furnishing decidedly the most economical as well as pleasant living for a family.

To those farmers who have been in the habit of getting along for years with a dwarfish half-cultivated bed or two for a garden, we say, try the recommendation here given for one season, and we are sure you never need be urged to it again—for the advantages will be so sensibly felt, that of the two, the work of the farm will be rather suspended for a day, or a part of a day, if necessary, than the garden should not be seasonably and thoroughly attended to.

A spot on the north side of the garden may be advantageously kept as a temporary nursery for choice fruit trees, (such as cherries, plums, and pears,) as they may be obtained from time to time from neighbors and acquaintances, until permanent places may be selected for their future location. Having paid a good deal of attention to trees and agriculture, we write from observation and experience.—*Baptist Register*.

THE HARD TIMES.

"It is an ill wind that blows no good," and we heard a shrewd old farmer observe the other day, that the low price of agricultural produce was already inducing many farmers to pay great attention to the improvement of their lands, who were formerly tempted to "skin" them for the large returns the market afforded.

The idea is not an unreasonable one; such is the cupidity and short-sightedness of human nature, that extra prices will always excite extra production at the expense of improvement. It is true, that money making is the great object of agriculture, but it by no means follows that the most certain way to effect it is to impoverish the land for the sake of a single crop. There is no state of the market in which a farmer may not prejudice his own interest by robbing his land, but it frequently happens, as at present, that prices of produce are so low, that

the best investment a farmer can make of his labor, is, to devote it to the improvement of his land, whereby, for the crop he would take from it now, he will receive twofold hereafter, when prices are better.

If we have succeeded in extracting any comfort out of the present state of things, we conceive we deserve at least as much credit as the man, who

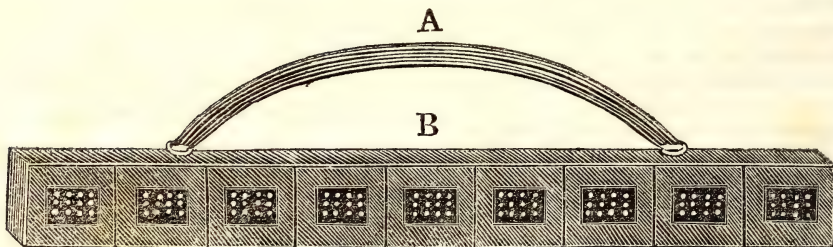
"Finds tongues in trees, books in the running brooks,
Sermons in stones, and good in every thing."

BABBIT'S ANTI-ATTRITION METAL.

Mr. Choate, from the Committee on Naval Affairs in the United States Senate, has reported in favor of a bill authorizing the Secretary of the Navy to purchase for the United States the right to use Babbit's *anti-attrition metal*. The metal is used in machinery—especially in steam engines. The improvement which the inventor

has secured by patent consists in the substitution of a soft, unctuous metal, for the hard brass or composition heretofore used to sustain the journals and other moving parts of machines. This soft metal is enclosed in a new, improved manner, in ribs or ledges of harder metal, to prevent its being spread by the weight of the shafting or by pressure. The Committee consider that the improvement is one which the government ought to possess the right to use. It secures a great diminution of friction, and a consequent saving of fuel, and saves one half or more than one half the oil heretofore necessary; lessens the cost of the original construction of the brasses which receive the journals—since they may be made much lighter than before; lessens the expense of repairs, because the soft metal wears longer than the hard, and the ribs and ledges may be relined at small cost: communicates increased efficiency to the engines by the diminution of friction, and prevents the heating of the journals, crank-pins, and other moving parts of the machinery.

A CLOVER BOX.



A, *Leather strap.*

B, *Clover box.*

In the engraving above is represented a box, for sowing clover seed, no doubt familiar to many of our readers. Indeed, we had supposed it too well known to need description, else its excellence would long ago have commended it to our notice; but within the last sixty days, we have been so frequently asked if we knew any implement which would sow clover seed evenly and regularly, that, late in the season as it is, we have concluded to describe this simple contrivance, that is by far the best and cheapest we know for the purpose.

The engraving is intended to represent a box eight or ten feet long, about four inches wide, divided into partitions six inches long. The box

is lying on one of its sides, so that the interior with a view of the bottom, is presented to the spectator. In the bottom of each partition is an opening of about three inches square, in which is inserted a piece of tin or parchment, or stiff paper, perforated with a number of holes of sufficient size for the clover seed to pass through. In each partition the seed is placed. To the box is fixed a strap, which is passed over the shoulders of the sower, and, carrying the box before him, he walks over the field, agitating the box by his hand if it requires more movement than it receives from his walk. Small slides may be made to cover the holes in the bottom, to prevent the seed from dropping out before the sowing commences.

Any good carpenter can make the box in a few hours, and it will be found extremely valuable for sowing, broadcast, any small seed.

From the New England Farmer.

MANAGEMENT OF SWINE.

In the first place, *there must be a good piggery*. There is a greater failure in this respect than any other. The swine are too cold in cold weather, and too warm in warm weather. The owners of these animals do not sufficiently consider that they require to be comfortable, in order to thrive and do well. It is a lamentable fact, notwithstanding so much has been said and written on the proper management of swine, that many have hogs that are continually *scolding* and *crying*; not so much on account of being scantily fed, as for the want of a comfortable piggery. I went by one of these miserable pens the other night, where the inmates were whining out something like the following:

Oh! cruel master, why do ye
Confine us in this piggery?
Oh! here we lie, without a bed,
Dirty and wet, from foot to head;
Boreas comes in, from every crack,
And bites our ears, our legs and back:
Thus we shiver all the night;
We scold, we whine, and sometimes bite.
Hard master! shall it always be,
To have no better piggery?

Who can suppose that swine will do well, when so uncomfortable and restless, and nature forces them to whine out such heart-rending complaints? A moment's reflection must convince every one that swine ought to have a dry, comfortable nest. Furthermore, it is highly necessary that it should be so, that they can bask in the sun in cold weather, and have the benefit of the air and shade in the warm. There is no doubt but a third may be saved by good accommodations.

In the second place, *there must be suitable food and good attendance*. Sows that have pigs, ought to have different keeping from what hogs generally have. In order to have their offspring do well, they not only must have meal, but a good supply of milk, or whey. This is soon imparted to their progeny, and, generally, (with good attendance) produces what the owner so much desires. Parturition having taken place, care should be taken for a few days not to over-feed. After which, the sow ought to be fed five times a day, and have about what the appetite craves. In other cases, roots, especially the *potato*, can be used to great advantage. This, I think, is the most natural for swine, and can be raised (all things considered) with the least expense. Not only roots, but meal, ought to be cooked. I very well know that there is some expense

about it—but where the accommodations are good, there will be undoubtedly a great gain.—Weaned pigs and swine that we are fattening, ought to be fed three times a day, and about such a time. Punctuality in this respect is highly important. Some contend to feed twice per day is as well, or better, than oftener. But against this practice, reason and experience raise a powerful voice. Nature teaches that they require not only a breakfast and supper, but a dinner. The food must be of good quality and dealt out liberally, but not to cloy. Meal should be made of a mixture of grain; it is more palatable, and has a better effect upon the recipients. By feeding swine three times a day, in a proper manner, the stomach may be duly distended, but not so as to produce disease; whereas, if the food that they have at three times, be given at two, it will so distend the stomach as to have this effect.

SETTING GATE POSTS.

An experienced carpenter, who has put up a great deal of fencing in his time, tells us, that he has found great advantage from reversing the posts, or setting them bottom upwards. He asserts that this simple arrangement will cause them to last doubly as long, and accounts for it by supposing that the pores of the wood are more closed and better protected from the moisture of the atmosphere, when their natural position is reversed.

For the Southern Planter.

THE APRICOT.

Messrs. Editors.—This delicious fruit is scarcely ever grown in the middle counties of Virginia, and is rarely found in the tide water country. It is owing to the frequent failure of the tree to bear. It blooms early, and the young fruit is blighted. This evil may generally be corrected by planting the tree some five or six feet from the north side of a wall. The blossom is thereby retarded until the severe frosts are over. By this means I have as often succeeded with this excellent fruit as with peaches in ordinary locations. Not the least recommendation of the apricot is it ripens in July, when other fruit is scarce. Mine are said to be the only bearing trees in the county.

I hope this communication will not be too late for those who may be induced to avail themselves of the present season for planting this valuable fruit.

Yours respectfully,

THOMAS MEAUX.

Amelia, Jan. 25, 1843.

THE TOMATO.

The celebrity of this plant has become astonishing. A few years since, prejudice reviled at its excellences with its most vindictive tauntings. *Now*, it is an article of so general popularity, scarcely a garden, or an apology for one, is to be found where it is not cultivated, and almost every voice is loud in proclaiming its excellences. The tomato has three kinds or varieties, to wit: the large common, the egg, and the golden drop. We prefer the two last kinds for culture, as they are firmer, or more solid in their texture and more delicate in their flavor. The tomato may be started in a hot-bed, or in boxes in the house in March. Then by care, large thrifty plants will be ready for putting out as soon as the season of frost is passed. They do not require a rich soil; this causes them to run too much to vine, but rather an excitement to push forward to perfection. We know of no more sure effective to produce this, than to put say half or a third of a common shovel full of hen or pigeons' dung in the hill. It is admirably calculated for pepper or for tomatoes.

After the early frost had killed the vines last fall, a friend of ours, of close observation and exact calculation, experimented feeding the tomatoes that remained to her cow. They were readily eaten, and the quantity of milk was increased. This certainly adds another to the thousand and one uses to which they have been applied.

W. B.

We have received a communication commenting in pretty severe terms upon what the writer was pleased to term, "the barbarity" of Mr. Drummond's plan of killing his old and useless horses, cattle, &c. for his compost pit.—In contrast with this inhuman conduct, is cited the treatment Dr. Parish, of Philadelphia, bestowed upon an old and favorite horse of his.

We hardly waited to finish this epistle, to throw it in the fire, and should not stop to notice it now, but that we have observed "stuff" of a similar character in some of the journals of the day. If any gentleman has a horse to which he has formed an attachment, in the name of common sense let him indulge his fancy in keeping and cherishing him as long as he pleases. And so, we can respect the feeling which preserves a favorite tree because it is linked with dear and cherished associations, but is this any reason for going without fire-wood, and leaving the forest untouched? We scorn the sickly sensibility, which will kill an old hard working ox for the purpose of converting him into beef, and cannot bear the idea of putting

him to death for any other use. We will guarantee that the animal has more sense than the man, and, if he could be consulted, would tell you, that if you are going to kill him, it is very immaterial to him whether you convert his carcass into beef or into corn and wheat. Now, if we were not afraid of shocking the delicate sensibilities of some people, we would recommend our farmers to proceed straightway to convert three-fourths of their dogs and cats into good wholesome vegetables in the way recommended by Mr. Drummond, and would even venture to urge, that there was no more impropriety in raising them for the express purpose, if they could find their *profit* in it, than there would be in raising and fattening a nice young pullet for the table.

A NEW SPECIES OF MANUFACTURE.

We learn that Mr. Stearns, of Woodstock, Vermont, is about to establish, at the State Dam in this city, a manufactory of satinets out of woollen rags and the usual amount of cotton warp. Flannel rags, old woollen stockings, old carpets, and every kind of woollen rags, excepting broadcloth and cassimere, will be used.—These rags are converted, by a certain process, into a substance resembling wool, and are then spun into yarn. Rags of broadcloth and cassimere cannot be used on account of their being deprived of the adhesive quality necessary to form a firm thread.—*Troy Whig*.

Patent Office, Jan. 25, 1843.

To the Editors of the Southern Planter:

Gentlemen,—I take pleasure in transmitting a very beautiful sample of "Kloss's White Blue Stem" wheat and refer to the Hon. John Snyder's letter for a description of its origin and properties. The same letter will inform those desirous of a larger quantity, where to apply. I also send a sample of Valparaiso wheat, just received from South America.

I am, most respectfully, yours,

H. L. ELLSWORTH.

HON. HENRY L. ELLSWORTH,
Commissioner of Patents:

Dear Sir,—The bushel of wheat I have sent you is the product of my county—Union, Pennsylvania. Its origin is briefly this: My neighbor, Christian Kloss, saw, in his field of Blue Stem wheat, a single top-proud head; he was struck with the contrast between it and the wheat of the whole field, this being the only white head in it, and much the largest. At

harvest time he secured the head and seeded it in his garden the coming fall; (I do not recollect the time, perhaps six years since;) he divided the next years' produce amongst his neighbors, and last fall there was perhaps 1,000 bushels of this seed sown; one farmer had 400 bushels: it is called Kloss's White Blue Stem. The wheat I send is the growth of last year; it will be recollected our country was filled with rust and smut,—this wheat escaped, yet, it is not quite as full in the grain as the crop of the preceding year; it weighs 65 lbs. per bushel.—We have the Mediterranean wheat in our country—the White Blue Stem is considered far superior. Hoping it may prove useful to the agriculturist, it being Pennsylvania staple, I hazard nothing in recommending it as the best wheat in the northern part of the State, and quite the best I ever saw.

Truly, yours,

JOHN SNYDER.

January 18, 1843.

We beg leave to return to Mr. Ellsworth the thanks of our farmers for his constant and disinterested endeavors to promote their interests.

The samples sent have been made up into little packages of twelve grains each, and are ready at our office for general distribution.

To our friend Mr. R. B. Haxall, the well known proprietor of the Columbia Mills, we have exhibited the specimens received from the Patent Office. The Valparaiso wheat he unequivocally condemns; he says it is an old acquaintance, has been frequently tried, and as often proved to be totally unsuited to our climate. The "Kloss' White Blue Stem" is a fine, plump, heavy grain, (although he hardly thinks it would weigh sixty-five) well worthy a trial, and certainly extremely valuable, if in any way invulnerable to smut and rust.

IMPORTANT INVENTION.

We have been much interested in the effects of a small instrument having the appearance of a *child's whistle*, but performing the important operation of inflating and distending the lungs, and giving them a healthy action. It almost performs miracles. A friend who has just returned from Philadelphia, and who used one of these little tubes for a fortnight, measures about four inches more around the chest than when he commenced its use: his voice is fuller and stronger, and there is every indication of permanent improvement. This important little agent in removing consumption is formed on very simple principles; the patient breathes entirely through a tube for four or five minutes, inhaling

the air through one aperture and exhaling it through a smaller aperture, thus retaining one quarter of each inspiration, which tends to expand the lungs.

This instrument is the invention of Dr. J. S. Rose, of Philadelphia, a man of great talents who makes that wide-spread disease, *consumption*, his sole study, and who, if his directions are followed, promises almost to banish from the land this baneful and inveterate foe to the human race. He has written a treatise on consumption, which all who have weak lungs should procure and read.—*Boston Bulletin*.

For the Southern Planter.

TOBACCO.

Messrs. Editors,—I have read with attention the extract in the last number of the *Planter*, from a pamphlet, published by Peter Minor, Esq. in 1822, on the "Cultivation and Management of Tobacco, from the Plant Bed to the Prize." It is interesting as well as instructive, thus to go back and learn the views and modes of management which were entertained and practiced even twenty years ago; especially, when we find them recorded by a practical man, and one who seems familiar with his subject. It is thus alone, that we are enabled to ascertain with accuracy the improvements which experience has brought to light. In the remarks which I am about to offer, I shall avail myself of your invitation, and attempt a review of some of the opinions advanced in the extract before me, as well as to point out some of the improvements which the experience of twenty years has, in my view, established.

Our writer's remarks on the selection of a spot for a plant bed and the propriety of early and hard burning, are, I think, judicious. One great advantage of burning before Christmas (by which I mean late in the fall or early in the winter) is, that it enables you to burn your land harder, and thereby impart greater fertility to the soil, which, if done late in the winter, will make your plants late and inferior, and if followed by a dry spring, cause a failure. The rationale of this I have never seen attempted,—but may it not be owing to the soil becoming surcharged with so many caustic ingredients, (as the potash, the pyroligneous and other acids generate in combustion,) as to require exposure to the atmosphere and rains for several months, in order to become sufficiently neutralized to act beneficially on the plants? Another advantage of early burning is, that, with the same amount of fuel, you can burn your ground much harder. At that season of the year your land is generally in better order, and is not as cold as it subsequently is, and hence it requires less wood to produce the desired effect. So it is economy

both of labor and fuel to burn early. I would add, that labor and fuel would be still farther economized, if, instead of heaping the brush in your new grounds and burning it out of the way, you would pile it on the spot selected for your plant patch, which, weighted with a little refuse wood, I have found to burn well, and answer every purpose.

Our writer in speaking of the preparation of the plant bed, recommends that the ground be "broken up about two inches deep with the grubbing-hoes," &c. I feel fully persuaded he has fallen into an error on this point; for it is well known, that plants are very liable to suffer from drought in the spring; by breaking up the ground then as deep as practicable with the grubbing-hoe, (being careful always not to turn up any subsoil) you ensure a better supply of moisture. Some of the best planters I am acquainted with use the coulter altogether for this purpose, which not only saves hoe labor, but enables them to break their land deeper, which they think a matter of great importance. It would not be out of place to mention here, that there is a method of preparing plant patches adopted by some of our most successful planters, which I consider a great improvement, and as it seems to have been unknown to our writer, or at any rates not mentioned by him, I will attempt to describe it. I refer to the practice of *underlaying* with tobacco stalks. This is, no doubt, familiar to many of your readers, though probably not to all. After the patch is thoroughly hoed up, chopped fine, and raked, commencing at one edge, a trench is made along its entire length with a broad hoe, the width of the hoe and about two and a half inches deep. The bottom of this trench is then covered with stalks, laid in with the hand one course thick, lengthwise and straight. When this is done, another trench is made similar to the first, and as near the first as possible without interrupting the stalks laid down; the earth taken out in order to form this second trench, is placed on the stalks, and fills up the first trench; the earth out of the third trench, in like manner, is placed on the stalks laid down in the second, and so on. By this means the whole patch is underlaid with stalks. The operation is simple and expeditious, and the plants are thus furnished with a manure better suited, both to their tastes and wants, than any other which can be found. It is best to select spots on alluvial branch flats to underlay, and the same spot may be burned and underlaid every year for a score of years, and it will become better and better—the stalks enriching and preventing the soil from becoming close. It is only necessary for any one, who has never tried this plan, to try it, and he will be convinced that it is greatly superior to any which is practised, both for quantity and quality of plants.

SEEDING.—There is a very common mistake

made, I think, in sowing our beds too thick, whereby the plants are small, yellow and sickly. The quantity of seed spoken of by our writer, viz: "a table spoonful to the hundred square yards," is the proportion I got from a successful planter, and have always adopted with good results. The first of February is recommended by our writer as the best season for sowing; I think, however, we have succeeded best when we have sowed before Christmas. I have thought when we came to transplant, that the plants from early sowing had better roots; I suppose the tobacco seed, like other seeds, in the first stages of germination, shoots its root down into the soil, some time before the stalk makes its appearance above the surface. This fact we have often noticed in corn, snaps, &c. and it may be, that the tobacco seed, by having more time allowed it, becomes better rooted. Of one thing I am fully satisfied—that flies do not destroy an early sowed patch as readily as one which is later sowed. I have frequently seen the plants eaten by the fly, or more properly, *flea*, (for they have no wings, and seem to be the smallest of the grasshopper tribe, of a dark brown color,) until you could scarcely see a leaf left, and the early sowed, would put out from the bud and do well, while the late sowed would be so much crippled as to die. This I have attributed to the former being better rooted, and consequently better able to resist injuries. Our practice is to sow when we burn, any time after the first of December; before that time, it might be unsafe, as a warm spell might cause the seed to sprout too early, and render them liable to be killed by the frosts of winter. We then cover *thick* with naked brush, as soon as the ground is trod, which covering is never taken off at all until about two weeks before we transplant, unless the spring is unusually wet, or the patch happens to be on land disposed to be springy—in either of which cases, we do so, that the sun and air may dry the soil. A thick coat of brush answers the double purpose of protecting the plants from the frosts as well as from the drought of spring. We manure our plants the first time when they are about the size of a ninepence, with fine stable manure, which should be kept carefully dry for the purpose, and then, in about two weeks, give them another top dressing of the same. The first dressing should be light, to avoid smothering the plant, and neither should be put on when the plants are wet with either dew or rain. The practice of manuring with stable manure early, when the horses are fed on hay, is inadvisable, on account of the grass seed; but if put on after the plants have grown to the size above mentioned, the grass will never interfere. We never find it necessary to take off the brush, either to top dress or hand weed. These can both be done about as soon as the brush could be removed and replaced. We find no

difficulty in walking on the brush with baskets of manure and in scattering it broadcast over the surface; it treads and bruises the plants less than if the brush was removed; and where the land has been properly burned there is but little hand weeding necessary. By treating our plant patches as above described, we have never had our plants killed by frost, nor have we ever had occasion to water them, and further, we have *never failed to have an abundance in good time.*

You will, I trust, gentlemen, pardon the length at which I have dwelt on this part of the subject, when you recollect that a very large proportion of the failures in our tobacco crops, are to be ascribed, either to scarcity of plants at the proper season, or to small, sickly, indifferent ones, which cannot survive the shock of transplanting. Our lands, owing to long cultivation, are not as free as they were formerly, and it requires rather earlier planting for the crop to come in ripe before frost. Good plant lands, too, are scarcer than they once were, and we must make up in cultivation and attention what we have lost in fertility. Having strong, large, vigorous plants, is half the battle. They resist drought, cut-worm, and all other enemies to which they are exposed, much better than small, delicate ones.

Should this communication (which has grown much longer than I intended) be deemed worthy of a place in your columns, gentlemen, I may feel encouraged to follow Mr. Minor in the cultivation of the tobacco crop,—the diseases or accidents to which the crop is exposed, and the modes of prevention as far as I am acquainted with them. There is, I think, an error in his remarks on this subject, which must be regarded by the best planters of the present day as fundamental. To this, should I write again, I will endeavor to call your attention.

Yours, very respectfully,

N. A. VENABLE.

Lunenburg County.

The great object we had in view in publishing Mr. Minor's pamphlet, over and above its intrinsic merits, was to call forth such comments, from just such a source, as those furnished us by Mr. Venable. We sincerely hope he will continue his review, and whilst his remarks are so entirely practical, he need not fear to weary either us or our readers by the clearness, and consequent length, of detail. If the readers of the Planter are not thoroughly instructed in the important art of tobacco making, it will not be our fault.

Experienced agriculturists tell us that all plants, whether in the garden, field, or forest, if in rows, should be placed in the direction of

north and south, in order to admit the sun's rays every day on both sides of the row.

ROOT CROPS.

In a conversation with Mr. Dicken, who is an old fashioned Virginia corn grower, and not much given to "new fangled notions," he expressed to us the opinion, that the farmers of Virginia were much indebted to Mr. BEMENT for his excellent essays upon the cultivation of roots, published in our columns. He says that for rearing calves he has never tried any thing equal to the ruta бага; the finest he ever raised, was fed upon nothing but pasturage in the summer, and chopped ruta бага in the winter. He entertains not the smallest doubt that every farmer in Virginia should raise a crop of roots for the winter use of his cattle.

For the Southern Planter.

POUDRETTE.

Gentlemen,—In running over the articles in the last number of your valuable paper, I was particularly struck with the one from your correspondent Za. Drummond, Esq.—it made every cord in my heart vibrate, and I felt, for one, that I was ready "to go hand in hand" with him, if not for "twenty-five years," at least to the close of my earthly existence, in attempting to improve that part of the Old Dominion which I call my own. I believe it was General Miller who, during our revolutionary struggle, when asked by his superior officer if he could storm a certain fortification of the British with an inferior force, modestly answered, "I will try sir"—he made the effort, and history has recorded the result. I have adopted this as my motto—I am determined to "try" what can be done. I remember to have promised you some time ago a short account of my method of preparing manures from human excrements. I will now redeem that promise, hoping that it may be useful to many of your subscribers. First, I collect the stercoraceous matters separately in large vessels or hogsheads, after the urine has become putrid, which will require but two or three days in warm, and ten or fifteen in cold, weather. I then add sulphuric acid to the urine slowly; if the urine is putrid, a powerful effervescence will immediately take place; the acid must be added until effervescence ceases. By this process, the carbonic acid in combination with the ammonia, is disengaged and driven off, and sulphate of ammonia is formed, which has no volatility, except at a very high temperature. Thus you secure the ammonia formed by putrefaction, which, otherwise would escape. I then add the

liquid to the solid excrements, incorporating them well together, until a very thin batter is formed; into this mass I stir in finely pulverized charcoal, according to my judgment, without regard to any precise quantity; this done, I spread the mass upon boards made tight, in the open air—stir frequently until the whole is dry, then pulverize with a spade, and barrel it up for the use of crops.

My drying boards are protected from the weather by a shed open to the south, so as to receive the benefit of the sun. Manure made in this way I call *Poudrette*, and of its value I can speak in the highest terms. When properly made, it is inodorous, and the application to crops easy, and the effect powerful. I made an experiment with it last season upon sugar beet, in comparison with bone dust, bone dust and stable manure mixed, and stable dung alone. The beets manured with poudrette, came up quicker, grew faster, and maintained a decided superiority to the last, making the largest and best beets; the quantity of poudrette was only a small train to each drill. I used it also upon corn with entire success. In this experiment I subjected it to a very severe test; I selected a very poor spot, put only one and a half gills to the hill as a top dressing, at the time of planting, and the result was truly astonishing, proving it to be beyond all doubt a manure of great strength and power, perhaps surpassing all others *now known*.

It must in all cases be used as a top dressing; such is its strength when planted with seed, the germ is destroyed, and consequently does not come up.

I shall make about one hundred barrels this season, which I intend to use chiefly on corn the coming spring, from which I anticipate the best results.

When I commenced I intended to say something about what, I have been doing in bone dust, dead horses, pigs, dogs, cats, &c. but I am reminded in your editorial what great severity your correspondents may expect at your hands, and as my piece is already much longer than my "*hand*," I shall close.

Sincerely yours,

GEORGE WOODFIN.

February 6, 1843.

Mr. Woodfin will please to recollect that although we may be a little squeamish about the *length* of our communications, we place no limit upon the *quantity*.

THE FARMERS' REGISTER.

We have received the first number of this well known work issued under the auspices of the new Editor. From this specimen we do

not hesitate to express our confidence in Mr. Pleasants' ability to *sustain* the well earned reputation of the "*Register*;" to *add* to it, would be difficult and superfluous. Mr. Pleasants is an accomplished gentleman and handsome writer; not only on his account, but for the honor and interest of Virginia, we hope the REGISTER may live and flourish for a thousand years.

For the Southern Planter.

CORN CULTURE.

Messrs. Editors,—Your February number contains two most excellent pieces on the culture of corn, and while I subscribe most heartily to Mr. A. Shriver's *close planting*, I object to his *four ploughings*, and more particularly to his "*thorough hoeing*," "that is, chopping away the old hill and giving it fresh ground, cutting up every spear of grass." *This is too much work*. Mr. Shriver thinks wheat succeeds corn to advantage. Now, wheat will not grow after corn in this part of Virginia.

Again, Mr. W. C. Young's notions of "ploughing in the fall"—"cross ploughing in the spring, and early planting, deep covering and anti-replanting" system, is admirable. But, *he too has too much work*: "four ploughings and one harrowing?" We in this part of the State have a great deal of worn out old fields, which are much improved by ploughing, say once in two, three, or four years. Now, why not plant double the quantity in corn, and give it two ploughings instead of four. I know we shall make more corn, and I am persuaded our lands will be benefited thereby, which should be with us the great desideratum.

Yours, &c.

A. BAILEY, JR.

Rough Chreek Church, Va., Feb. 9, 1843.

EMIGRATION TO VIRGINIA.

We are happy to see that the natural gifts of the Old Dominion begin to be appreciated by northern emigrants. To good managers we have no doubt that every thing considered, the climate, the facilities of market, the society, &c. &c. the cheap, exhausted, but *grateful* soil in many parts of Virginia, offer the fairest opportunity of investment that can be found in the Union. And now that the golden visions in the West have vanished, the less glittering, but more substantial advantages of the older States begin to be understood. The emigrants to the county of Fairfax, alluded to in Mr. Rives' address, are, we understand, highly delighted with their purchase, and are daily gaining accessions

to their numbers from the county of *Dutchess*, probably the richest and best cultivated portion of the State of New York. In allusion to this emigration, Governor Hill, in the last number of the "Visitor," remarks:

"We have fully satisfied ourselves of the fact, that there are many thousands of acres of land in the States along the Atlantic seaboard now lying useless that may be purchased and cultivated to better advantage and profit than the best lands offered for sale at the West. The Dutchess county farmers who have taken up land for improvement in Fairfax county, Virginia, if their history for the next twenty years could be written, will turn out to be more uniformly successful than an equal number with the same means who have removed to the far West. The new western lands may be more easily brought into cultivation; but Commodore Jones has demonstrated, and the emigrants from Dutchess county will prove that the best and most profitable investment of all will be the judicious expenditure and labor bestowed in reclaiming the worn-out lands of Fairfax county, Virginia."

In this connexion, we will take occasion to mention, that we are authorized to sell a tract of land of 1,700 acres, lying in the county of Prince William, (the adjoining county to Fairfax). The situation is remarkably healthy, the water excellent, and the wood abundant; the whole affording fine pasturage for sheep. It would afford a capital stand for a tavern and store. The whole tract can be purchased for three thousand one hundred dollars, *cash*, or for two dollars an acre, on a reasonable credit.—This is probably one of the greatest bargains to be had in Virginia, and northern Editors would no doubt be conferring a favor upon their subscribers by disseminating information of the opportunity it affords.

For the Southern Planter.

M'CORMICK'S REAPING MACHINE.

Messrs. Editors,—I find that you did not apprehend the purport of my 4th inquiry relative to C. H. M'Cormick's reaper. When I asked "can the reaper be conveniently used unless the wheat ripens in large bodies," I did not mean to inquire whether it would be advisable to purchase one unless the farmer had large fields to reap, but simply to learn whether the machine could be conveniently used to cut small lands, when the grain ripens not in "large bodies," but irregularly in *patches*, as it sometimes does, or whether from the inconvenience of turning, you

must embrace several acres in a land to work the reaper to advantage?

As this inquiry is fully answered in a letter received by me from an intelligent practical farmer, (Mr. Abraham Smith, of Rockingham,) and as he speaks in terms of high commendation of the reaper, I shall take the liberty of sending you an extract, thinking that the experience of this gentleman in the use of the machine for three harvests, may be acceptable to many, who, like myself feel an interest in its success.

Very respectfully,

GEORGE A. SMITH.

February 8, 1843.

"*Dear Sir*,—Yours of the 18th instant came to hand on yesterday. I shall endeavor to answer your inquiries respecting C. H. M'Cormick's Reaping Machine in the order in which you have made them.

1st. I have used one of them for three harvests, and have found no reason to alter my certified opinion.

2d. I never cut wheat with dew or rain on it, consequently cannot answer your question on that subject.

3d. It cuts grain on land not more inclined than six or eight degrees as well as on level land. Indeed I have worked it on land much steeper, and found that it did not do so well. It was inclined to run in or out of the grain. If above, it would run in, if below, run out.

4th. You must cut a way with the cradle to start it, and when a square is nearly finished, you will save time by finishing it with the cradle—too much turning with the machine is too great a loss of time. It is not profitable to include less than three or four acres in a square; for instance, if I wish to cut a twenty acre field, I would start through the middle of it, and cut backwards and forwards until it got too wide for profitable work—after which I would make two cuttings of the field.

5th. I have never seen it work upon bedded land, but have been informed that it has been worked on the James River lowgrounds, which is generally bedded, with advantage.

6th. I have never found the ground too wet on my land yet. I would suppose that when it was so miry as to let the wheels sink much, it would not work well.

7th. The cutter has a sickle edge, and if a good one, will cut well ten or twelve days; I have two for my machine; the sickle can be ground.

8th. In wheat three feet high, and upwards, or if tangled, it will save grain better than any way I have ever seen—in fact it saves all.

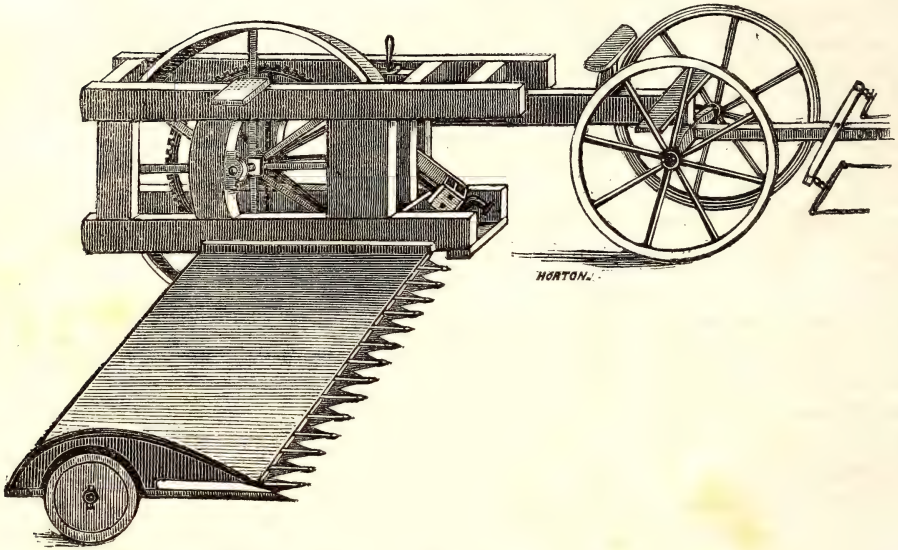
9th. It will reap from twelve to fifteen acres a day, if well tended. It requires two active boys to drive and rake it alternately.

10th. The machine can be drawn by two horses, and is not liable to get out of order. All that is necessary is to have careful hands to work it. It must be kept off stumps, sprouts, and stones that are too large for the wheels to

run over. I cannot say that mine is more liable to get out of order than the cradle. It matters not what machine you have, it must be kept in order or it will do badly."

For the Southern Planter.

HUSSEY'S REAPING MACHINE.



Being apprehensive that an impression prevails amongst farmers of the lower section of Virginia unfavorable to my Reaping Machine, and believing, as I do, that that impression has been formed in many instances from a want of correct information, I wish to occupy a small space in your valuable journal to correct as far as I can such erroneous impressions. To do so, it will be necessary to account for the apparent failures, or what has been called such. It cannot be denied that my first machines were very imperfect, but the work was always well done, the chief difficulties being the liability to get out of order, the failure to cut wet grain, and the severe labor on the shaft horse. The first has been obviated, so far as strength and good workmanship will do it; the second measurably so, and the third is entirely removed; but carelessness and bad management in the field cannot be guarded against. My machine originally worked with two horses abreast, and rested on four wheels; it was afterwards changed to shafts, like a cart; the machines used on the James River were of the latter kind. The difficulty arising from the imperfection of these ma-

chines was much increased by circumstances for which the machines should not be held accountable. In many fields where they were used the land was cultivated in ridges, with furrows much deeper than some farmers have since found necessary, who have cultivated their fields with reference to cutting with the machine; but this difficulty has been in a great measure obviated by improvements. Another cause of difficulty has been the entrusting the machine to incompetent hands. The machine has in many instances been entrusted to a gang of negroes in one part of the field, while the overseer was attending on the cradlers in another part; the consequence has been, the oil has been forgotten, the screws have been neglected, which were liable to shake loose, until some accident has happened; but this liability is now guarded against. Besides this, farmers have sometimes not found so many acres cut as they expected; this is not always to be attributed to the fault of the machine, but to a want of a reasonable progress ahead, owing to that well known propensity of slaves to improve all possible opportunity to stand still. It has been my constant aim, for

years, to discover, and guard the weak points, and I think my present machines strong and durable. With your permission, I will insert some short extracts from letters which I have received. The first is from Col. Edward Lucas, of Jefferson county, Virginia, writing for his brothers, he says, "I have now the pleasure to communicate to you the result of our experiment with your grain cutters, which have been highly satisfactory, indeed, they have exceeded our most sanguine expectations, and this too after a fair trial of some eighteen days cutting with them this year, and in comparison with cradles in the same field, we found the cutters (meaning the machines) much less liable to break, or be injured by running over rough, and hilly ground, and coming in contact with obstructions, such as rocks, stones, and stumps, than we had anticipated. My brothers say they would not be without them for any consideration. They had four hundred and forty-five acres of heavy wheat, some of it unusually so, and much of it lodged and twisted, and sixty acres of oats, all of which, except forty or fifty acres, was cut by the cutters (two machines) in less than fifteen days, making as high as twenty acres some days, and could have gone up to twenty-five acres to the cutter, if the grain had stood up, and the mules had been urged to their fastest walk." Mr. William H. D. C. Wright, of Queen Anns county, Maryland, in a letter, says, "The machine fulfilled its object to my satisfaction. Where my wheat was heaviest it gave full employment to fourteen binders."

I could multiply such testimonials to fill your journal, if admissible. Many farmers say that the machine has made an additional saving of at least its cost in one year. As to my own opinion, I am aware that it will amount to little, but I will say this much, that I am ready to engage to cut thirty acres in one day with one machine, with good horses, in good wheat and on good ground, and the field shall be better cut than any cradled field that can be produced.—The machines used by Col. Lucas had shafts and rested on two wheels; that used by Mr. Wright had a tongue and rested on four wheels. The restoration of the tongue and the necessary wheels, combined with my other late improvements in other respects, is found to be advantageous; it relieves the horses of an objectionable weight, and adds much to the steadiness of the machine, the speed, and quality of the work being the same.

I see in your last Planter an account of another reaper in your State, which is attracting some attention; it shall be my endeavor to meet that machine in the field, in the next harvest.—I think it but justice to give this public notice that the parties concerned may not be taken unawares, but have the opportunity to prepare themselves for such a contest, that no advantage

may be taken. Those gentlemen who have become prudently cautious, by being often deceived by humbugs, will then have an opportunity to judge for themselves.

Respectfully,

OBED HUSSEY.

Baltimore, Jan. 30, 1843.

VIRGINIA MANUFACTURES.

The Messrs. Barnes have sent to our office, for the inspection of our country friends, some of the most splendid specimens of agricultural and other edge tools we have ever seen. Are the farmers of Virginia aware that we are selling axes made by these gentlemen, for \$1 25 apiece, or \$14 a dozen, and warranting them to be equal to any made in the United States?

For the Southern Planter.

BROOM-CORN HAY.

Messrs. Editors.—For the last three years I have been in the habit of sowing the broom-corn seed, broadcast, mixed with the common field peas, which has made an excellent hay, when properly cured. The spring of 1842, through the middle of my patch I sowed a strip of about ten feet wide with Indian corn; the whole being managed precisely in the same way, and to my surprise, when ready to cut, the broom-corn on each side of the Indian corn, looked like two walls—the broom-corn about five feet high, while the Indian did not much exceed two feet. Of course, it was all seeded very thick, and it must be thick, or it will be too coarse for good hay. So, I conclude that the broom-corn is much to be preferred. I have some of the hay on hand that is now two years old. My practice is to house it; my stock eat it kindly. I try to sow it thick to prevent the stalk being large. I esteem it best when the stalks are about the size of large oat-stalks, and from three to four feet high; it should be cut just after the broom or head makes its appearance; that, which is cut in the forepart of the day, should be shocked up after four o'clock; it need not be spread the next day, but the day after, it may just be upset and opened—at evening it should be shocked up again, and if not too coarse, in a few days, it will be ready for the house. You need not fear rain while in the shocks.

One word about the land and seed. Very rich land is not so good; land that will produce from four to five barrels of corn per acre, is rich enough; if the land is very rich, it will grow too large in spite of you. I think one bushel of broom seed and a half bushel of peas, clay-red or black-eyed, will make it thick enough; it

may be sowed any time in May, upon land that water will not remain on long.

I am now carting out the finest marl perhaps you ever saw; my land has the greatest supply of it, and very convenient. It is as fine as wheat-bran, and after being exposed, becomes much whiter, little or no foreign matter in it.

Yours, J. BUNCH.

Chuckatuck, Va., Feb. 8, 1843.

P. S.—I find so many good things, and practical ones too, in the Southern Planter, I wish I could pay back something for interest, say nothing about principal—O, by the bye, I had like to have forgotten my cart-wheel composition; it is the best (blacklead excepted) of anything I have ever used—it is both simple and cheap. I am now, and have been using it for some time; try it before you condemn it. It is clean wood ashes mixed with any kind of common grease or train-oil, if you please.

J. B.

THE MANNER OF APPLYING MANURE.

We have received a communication from Mr. S. T. Redd, of Cumberland, on this important subject. After dilating upon the absolute necessity of an improved system of husbandry, whereby we may restore to our lands the fertility of which the skinning system of our ancestors has deprived them, Mr. REDD goes on to remark,

"I am clearly of the opinion, from my own experience, that all the manure raised during the last summer and fall, should at suitable times be carried on the land and scattered in the month of *February*. Although I expect many will differ from me, thinking that certain properties may be lost by exhalation; but the fact is, being spread on in this month, the sun shines with such little heat, none of the properties are lost. It has time to saturate the soil in order to lighten and quicken it, so that whatever is planted upon the land, grows off instantly. One of my neighbors has been trying the plan for the last five or six years; he is delighted with it, and thinks the manure acts better and the land produces more abundantly. Not only is there this advantage in it, but it so quickens the soil, that the young tobacco plant will start to grow as soon as it would in new ground or second year's land, which is of considerable importance; the young plant making such a quick start, soon gets out of the reach of what is commonly called among us the cut-worm, which is so very destructive in cutting down the young plants when slow in starting. Your land should be fallowed previously to carrying out your manure, and it should be spread as carried out. I made an experiment last year upon two pieces of land of the same quality. I had manure spread upon one piece in the month of February, and the

other at the usual time, just before planting; the difference was very considerable. I have moreover frequently seen it tried with the same result. There are these advantages. The tobacco grows faster and generally larger—ripens much earlier, and makes generally richer tobacco. All I ask of those who differ with me is, to make a fair trial."

POUDRETTE.

We feel particularly anxious to call the attention of our farmers and gardeners to this convenient, stimulating, and valuable manure. We had our own interest very much excited by the astonishing, and we *guess*, rather exaggerated accounts, we heard of its effects whilst we were at the North last fall. That it is one of the most powerful fertilizers known, and that it should be at least fairly tested by every farmer, who has an opportunity of obtaining a barrel, we do not hesitate to assert; and this, because the experiment can be made at so small an expense, and if it is all they say of it, it will prove the most important addition that has ever been made to the farmer's resources. That it is ever to supersede stable manure, or that the day will ever come when it will be to the farmer's interest to neglect his farm-yard and compost heap, we consider all humbug and nonsense. But that after the farmer has put out all the dirt, dung, and compost, that he can rake and scrape, that he may then purchase poudrette for the balance of his land, that would otherwise go unmanured, with a prospect of realizing two or three hundred per cent. on the outlay, we are strongly inclined to believe.

All chemists agree in according to this substance the very highest fertilizing properties.—Prof. Johnson, than whom none stands higher in the scientific world, says,

"*'Night soil'* is probably the most valuable, and yet in Europe at least, the most disliked and neglected, of all the solid animal manures. It varies, no doubt, in richness, with the food of the inhabitants of each district—chiefly with the quantity of animal food they consume—but when *dry*, no other solid manure, weight for weight, can probably be compared with it in general efficacy. It contains much soluble and saline matter, and as it is made up from the constituents of the food we eat, of course it contains most of those elementary substances, which are necessary to the growth of the plants on which we principally live."

We have heard it estimated that one bushel

of poudrette contained at least as much fertilizing power as ten bushels of stable manure, whilst the facility of putting it out, was much more than ten times as great. It has been applied in this country with great success to wheat and corn. Upon potatoes, peas, turnips, and other garden vegetables, it is described as producing the most astonishing effect in hastening their maturity and increasing their products.—In a letter to the "United States Farmer" Mr. Jos. Tyrrell, of New Jersey, states,

"In March last I planted six rows of early peas, four of the rows were manured with poudrette sprinkled liberally over the seed. These came up five or six days before the others, they grew more luxuriant, came in blossom ten days sooner, and yielded much more abundantly than those which had no poudrette. I have tested its merits as a manure for cucumbers and melons, and prefer it to any other for those articles."

Mr. Lemuel Soper, of Long Island, makes the following statement :

"I have used poudrette on corn at the rate of a gill to the hill, which produced as good corn as where I put a shovel full of yard manure in the hill. The worms were not as troublesome where poudrette was used as where other manure was used. I also used it on wheat, at the rate of forty, sixty and seventy bushels to the acre. Where I used forty bushels to the acre, I got as good wheat as where I used forty wagon loads of barn-yard manure, and equally as good as where I used sixty or seventy bushels of poudrette to the acre.

"I also used it on all kinds of garden vegetables, and never had better success. I consider it better for corn in the hill than bone."

Mr. W. F. Blydenburgh says,

"On grass lands, in the month of May, it has a decidedly beneficial effect as a top dressing. I should think twenty bushels to the acre would double the crop for one year, but doubt whether it would show much on the second." Mr. Blydenburgh has used it on nearly all the variety of crops raised on Long Island, and with a view of testing its relative value with other manures. He says, 'I applied the article, last summer, to Indian corn, melons, and other vines, and ruta бага. On corn, a gill was put in the hill, against eight times the quantity of hog-pen manure, and against five times the quantity of fish manure, the latter a compost of 'sting Rales' and earth, prepared the previous autumn, with results much in favor of poudrette for the first six weeks, after which its superiority became less manifest, until the general appearance and

crop became so nearly equal that no difference could be perceived. * * * * In conclusion, I would say that for the hills of corn, poudrette has no rival, so far as the labor and expense on the one hand, and produce on the other, are to enter into the account. A gill to the hill is better than a larger quantity, unless the first four weeks after planting should prove to be very wet, or unless the ground is low and moist. I have seen a striking instance of the good effects of poudrette on a field of oats, applied by one of my neighbors at the rate of fifteen or twenty bushels to the acre, on land of middling quality. The yield was increased at least 70 per cent."

For the information of those who have already ordered the article, as well as those who may conclude to do so, we copy the following directions for its use, furnished by Mr. D. K. Minor, of New York :

"I recommend the use of 20 to 25 bushels to the acre for corn, on ordinary land. When the ground has been ploughed, and lays in furrows, I would spread by hand, at broadcast, about 14 or 15 bushels to the acre, and then harrow cross-wise of the furrows, mixing it thoroughly, with the soil. I would then mark out the rows with an ox chain, drawn on the ground, and drop the corn, and put about half a gill in the hill, and cover it up with the corn. This would require near 8 bushels, making about 23 bushels per acre,—or three-fourths of a gill may be put in the hill at planting, and an equal quantity spread on at broadcast, and well worked in at the first, or second hoeing—or, if not obtained in time for planting, the whole may be spread on, and thoroughly worked into the soil, at the hoeing. It is undoubtedly most effectual when applied at planting; but still, very important benefit will be obtained from its application when applied at the rate of 15 or 20 bushels to the acre at the first or even second hoeing.

"For wheat, to be followed by grass, I would spread on at the sowing from 15 to 20 bushels to the acre, to be harrowed in with the seed.—This will give it a vigorous growth in the fall, and enable it to stand the winter. I would also spread ten bushels more upon it in the spring, and pass a light harrow and roller over it.—When used as a top dressing for wheat or grass, without being harrowed in, it should always be just previous to a shower.

"It is found to act very favorably on grass seed, especially on clover. I have reports from Dutchess and Westchester counties, which say that where poudrette was used on wheat in 1839 and 1840, the grass, especially the clover, is much better than where other manure was used in the same field, so much so indeed, that it is readily perceived on going into the field.

"For turnips, 25 or 30 bushels is a good

dressing. If the seed is sowed at broadcast, the poudrette should be applied in the same way and harrowed in with the seed. For *buckwheat*, 10 or 12 bushels; and for *oats*, 15 to 20 bushels, according to the condition of the land, may be used, *always* to be harrowed in with the seed. For *potatoes*, a gill to the hill, to be put in with the seed, is sufficient on ordinary land; a larger quantity will be likely to make more *vines* than are useful.

"For *cucumbers*, *melons*, and other garden vegetables, it may be used in small quantities at *planting*; and on melons, cucumbers and squashes, it will be found a *preventive* to the *striped bug* and other insects, if sprinkled over them in small quantity after they are fairly up. I find the same *prejudice* and *dislike*, on *first* acquaintance with it, among *insects*, as among *some men*. On applying it to cucumbers and melons, I was amused to see the *yellow bugs*, and other like *fastidious* insects turn their backs upon me, as I have often been to see gentlemen of *delicate* nerves turn up their noses at the *mention* of 'Poudrette'!! This circumstance, however, may not render this valuable fertilizer, of less value, any more than the opinion of *gentlemen* of 'delicate nerves' renders the enterprise one of doubtful propriety. I am satisfied from my own experience, that it will be found very valuable on all garden vegetables, not only in producing a rapid growth, but also as a guard against *insects*."

CORRECTION.

A very intelligent gentleman has called our attention to the article on "Urine," at page 35 of the last number of the Planter. It is there stated that a pit of certain dimensions can be filled with loam, in Scotland, for about £41 16s. Our informant states that he is in progress of trying the plan recommended, and that, even in this country, where labor is so much higher, he is satisfied that the pit can be filled for about \$22, which is the sum at which he has seen it estimated in other papers. He concludes that it is a misprint, and fears the error may deter some from trying what he conceives to be an invaluable experiment.

WHITE CARROTS.

This is a new species of that valuable root, and from its uncommon productiveness must be an important acquisition in the field root culture. For milch cows, and any other stock, it is a cheap and rich food. From our own experience we are enabled to say its growth excels the common orange carrot in its yield. Unlike others, it projects several inches out of the

ground, like the sugar beet, or long turnip. In rich soil with deep tilth, the production is enormous. Twenty-two tons are said, by the American Agriculturist, to have been raised per acre this year in Massachusetts.—*Farmers' Cabinet*.

This is the root, our readers will remember, so highly recommended by Mr. BEMENT in his communication to the Planter. Since the publication of the article, we have had frequent applications for the seed, and we take this opportunity of saying that we are in daily expectation of a large supply from the North.

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AGRICULTURAL AND VETERINARY STUDIES

The first of the subjects to be considered is the importance of the soil in the production of food and the effect of the various factors which enter into its fertility. The second subject is the importance of the climate in the production of food and the effect of the various factors which enter into its fertility. The third subject is the importance of the water in the production of food and the effect of the various factors which enter into its fertility. The fourth subject is the importance of the air in the production of food and the effect of the various factors which enter into its fertility. The fifth subject is the importance of the light in the production of food and the effect of the various factors which enter into its fertility.

The sixth subject is the importance of the human element in the production of food and the effect of the various factors which enter into its fertility. The seventh subject is the importance of the animal element in the production of food and the effect of the various factors which enter into its fertility. The eighth subject is the importance of the plant element in the production of food and the effect of the various factors which enter into its fertility. The ninth subject is the importance of the mineral element in the production of food and the effect of the various factors which enter into its fertility. The tenth subject is the importance of the organic element in the production of food and the effect of the various factors which enter into its fertility.

The eleventh subject is the importance of the chemical element in the production of food and the effect of the various factors which enter into its fertility. The twelfth subject is the importance of the physical element in the production of food and the effect of the various factors which enter into its fertility. The thirteenth subject is the importance of the biological element in the production of food and the effect of the various factors which enter into its fertility. The fourteenth subject is the importance of the geological element in the production of food and the effect of the various factors which enter into its fertility. The fifteenth subject is the importance of the astronomical element in the production of food and the effect of the various factors which enter into its fertility.

The sixteenth subject is the importance of the meteorological element in the production of food and the effect of the various factors which enter into its fertility. The seventeenth subject is the importance of the climatological element in the production of food and the effect of the various factors which enter into its fertility. The eighteenth subject is the importance of the hydrological element in the production of food and the effect of the various factors which enter into its fertility. The nineteenth subject is the importance of the geophysical element in the production of food and the effect of the various factors which enter into its fertility. The twentieth subject is the importance of the geobotanical element in the production of food and the effect of the various factors which enter into its fertility.

AGRICULTURAL AND VARIETY STORE.

The Subscribers, in connection with the Planter, have opened an Establishment in the City of Richmond, to which they would call the attention of FARMERS and HOUSEKEEPERS in general. They have made such arrangements at the North and elsewhere, as will keep them constantly supplied with the latest and best improvements in the following articles:

Ploughs, Cultivators and Harrows
Corn Shellers and Straw Cutters
Seed Sowers and Cob Crushers
Horse Powers and Threshing Machines

Wheat Fans, Axes and Hoes
Spades, Shovels, Forks and Rakes
Pruning Instruments
Seeds, Garden Tools, &c. &c.

TO THIS THEY HAVE ADDED

A HOUSEHOLD DEPARTMENT,

Comprising a large assortment of

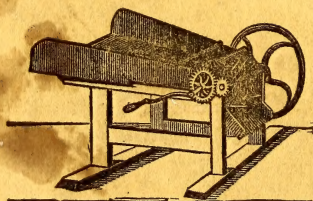
Mats, Brooms, Brushes, Pails, Measures, &c. &c.

They have determined to sell their Goods for nothing but CASH; consequently they can be satisfied with very small profits, and having laid in their Stock upon the most favorable terms, it will be a matter of astonishment to those who can start a little money and will give them a call, to find the difference in prices effected by the Cash System.

Many of the articles are of a novel character, and such as have never been offered in this market before.

BOTTS & BURFOOT.

SOUTHERN MANUFACTURES IN THE NORTHERN MARKET.



We have sold upwards of a thousand dollars worth of our **Straw Cutters** in the Northern Market, notwithstanding the hardness of the times, since the first of October.

We have just received a beautiful Medal, which the public are invited to call and examine, awarded us by the American Institute of New York for the best Straw and *Stalk* Cutter, exhibited at the Fair of October, 1842, open to the world for competition, and at which was exhibited every variety, of any celebrity, made in the Union.

We are now prepared to furnish them, made in the most substantial manner, at \$30, *cash*.

BOTTS & BURFOOT.

POUDRETTE.

We saw and heard so much of this article at the North, that we determined to give our Farmers an opportunity of testing its value. Accordingly, we sought and obtained the Agency of the New York Poudrette Company, and we are now prepared to furnish the article at the New York retail price, with cost and charges added.

BOTTS & BURFOOT.